3.5 inch Hard Disk Drive

PC-HDD3200-3

For the IBM PC/AT User's Guide

CONTEC

⚠ Handing Precautions

PC-HDD3200-3 is designed to withstand normal handing during unpacking and installation. Take care must to avoid excessive mechanical shock or electrostatic discharge (ESD) that can permanently damage the PC-HDD3200-3 and void the warranty. Hard drives are typically damaged because of ESD, rough handling, or shock and vibration.

When the PC-HDD3200-3 is not in its shipping container or installed in its proper host enclosure, it must remain in the antistatic bag. To prevent damage, do not unpack your WD Caviar drive until you are ready to install it.

この度は、PC-HDD3200-3 をご購入頂きまして、ありがとうございます。
本取扱説明書の手順に従ってご使用くださいますようお願いします。

⚠注意

PC-HDD3200-3 を取り扱う際には、過度の機械的な部分への衝撃や永久的なダメージとなる静電気の放電(ESD)をさけ、アフターサービス保証が無効にならないように注意してください。

ESD による典型的なハードディスクドライブ(HDD)のダメージは乱暴な取り扱いや衝撃、振動によるものです。輸送時などは静電防止バッグに梱包し、十分に注意して取り扱ってください。

1. Standard Factory Connectors

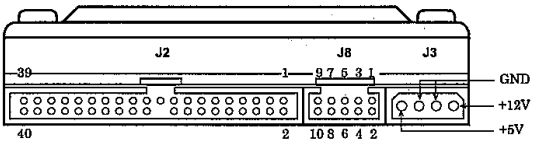


Figure 1. Component Locations

2. Jumper Settings

The PC-HDD3200-3 has a jumper bock (J8) located next to the 40-pin connector on the drive. You can assign the PC-HDD3200-3 as either a single, master, or slave drive. Refer to Figure 2 for an illustration of all jumper settings.

Single Drive Mode (Factory Setting)
If the drive you are installing is the only drive in your system, use this setting.

Master Drive Mode (Dual Master)
If the drive you are installing is the master drive in a two-drive system, use this setting.

Slave Drive Mode (Dual Slave)
If the drive you are installing is the slave drive in a two-drive system, use this setting.

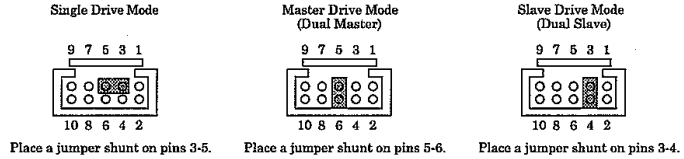

Single Drive Mode
9 7 5 3 1
10 8 6 4 2
Place a jumper shunt on pins 3-5.
Master Drive Mode (Dual Master)
9 7 5 3 1
10 8 6 4 2
Place a jumper shunt on pins 5-6.
Slave Drive Mode (Dual Slave)
9 7 5 3 1
10 8 6 4 2
Place a jumper shunt on pins 3-4.

Figure 2. Jumper Setting

3. Mounting Restrictions

Screw Size Limitations

The PC-HDD3200-3 is mounted to the chassis using four 6-32 screws. Recommended screw torque is 5 in-lb. Maximum screw torque is 10 in-lb.

Grounding

For best results, mount the drive with all four screws in the side grounded to the chassis (positions A, C, D, and F in Figure 3). You must ground the drive with at least one mounting screw.

Side Mounting
Use four metal screws in A, C, D and F. If less than four screws are used, remove in this order: C, D, and then F. You must use a screw in position A.

Top Face Mounting
Use four metal screws in 1, 2, 3 and 4. If less than four screws are used, remove in this order: 2,4, and then 3. You must use a screw in position 1.

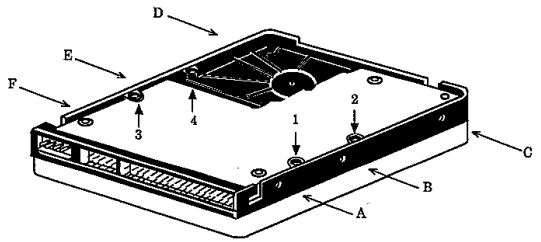


Figure 3. Grounding Diagram

4. Hardware Specifications

Item	Hardware specification
Recommended setup parameters (Cylinder x Head x SPT)	6296 x 16 x 63 (Do not exceed the maximum sector capacity when specifying the number of cylinders, heads and sector per track.)
Formatted capacity	3249.3MB (A megabyte(MB) as 1,000,000bytes.)
Interface	40 - pin EIDE
Bytes per sector	512
User sectors per drive	6,346,368

	12VDC	5VDC
Current requirement		
Spinup	1.8A Max.	530mA
Read / Wirite	240mA	660mA
Seek	580mA	600mA
Power dissipation		
Idle	240mA	660mA
Standby	30mA	192mA
Sleep	30mA	96mA

	Operating conditions	Non - oprating conditions
Temperature	5℃ - 55℃	-40℃ - 60℃
Humidity	5 - 85% RH non - condensing 33℃ (Maximum wet bulb)	5 - 95% RH non - condensing 33℃ (Maximum wet bulb)
Anti - shock (during operation)	Less than 10G (3ms half - sine pulse)	Less than 150G (3ms half - sine pulse)
Anti - vibration (during operation)	Less than 0.75G (20-300Hz)	Less than 4.0G (20 - 500Hz)

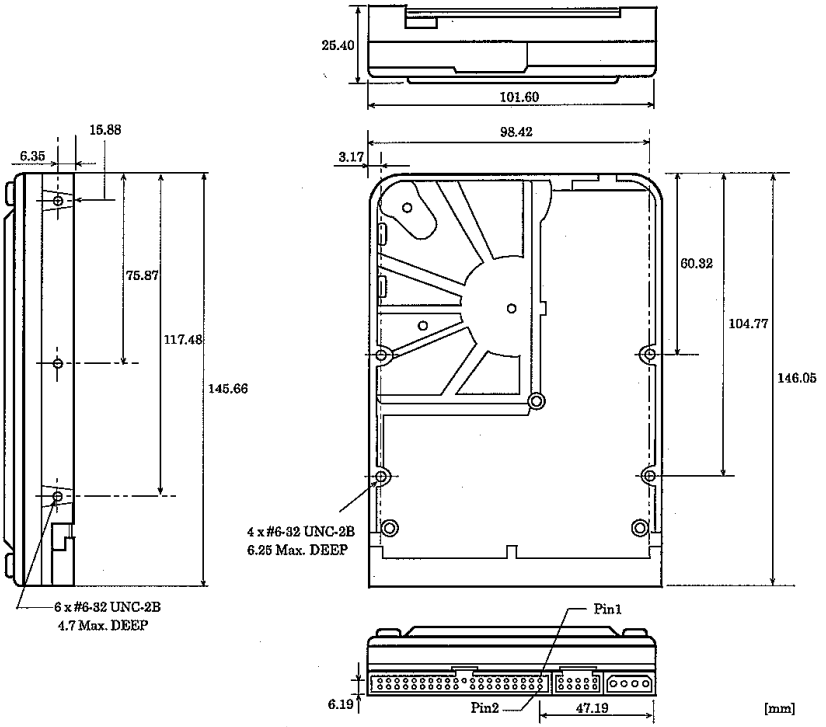
5. J2 Pin Assignments

The PC-HDD3200-3 interfaces with the host I/O bus via the 40-pin connector (J2) illustrated in Figure 1. Table 1 identifies the pin numbers of the J2 connector and the corresponding signal names and signal functions.

Table 1. Pin Assignments

Pin	Assignment	Pin	Assignment
1	HRST	2	GND
3	HD7	4	HD8
5	HD6	6	HD9
7	HD5	8	HD10
9	HD4	10	HD11
11	HD3	12	HD12
13	HD2	14	HD13
15	HD1	16	HD14
17	HD0	18	HD15
19	GND	20	KEY
21	DMARQ	22	GND
23	HIOW	24	GND
25	HIOR	26	GND
27	IORDY	28	HCSEL
29	HDACKN	30	GND
31	HINTRQ	32	IOCS16
33	HA1	34	PDIAG
35	HA0	36	HA2
37	HCS0	38	HCS1
39	HDASP	40	GND

6. External Dimensions



Note!

Mounting hole location tolerance is ±0.25mm. Numbers in boxes are basic numbers.

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